Ministry of Finance WORKING PAPER No. 17
www.pm.gov.hu

DÓRA BENEDEK, RÉKA FIRLE AND
ÁGOTA SCHARLE

DEGREE AND EFFICIENCY OF REDISTRIBUTION

July 2006

Authors: Dóra Benedek
Réka Firle
Ágota Scharle
Ministry of Finance

Series Editors: Dóra Benedek and Ágota Scharle
Ministry of Finance
Economic Research Division

The Economic Research Division (former Strategic Analysis Division) aims to support evidence-based policy-making in priority areas of financial policy. Its three main roles are to undertake long-term research projects, to make existing empirical evidence available to policy makers and to promote the application of advanced research methods in policy making.

The Working Papers series serves to disseminate the results of research carried out or commissioned by the Ministry of Finance.

Working Papers in the series can be downloaded from the web site of the Ministry of Finance: http://www.pm.gov.hu

Series editors may be contacted at pmfuzet@pm.gov.hu

Summary

The objective and means of redistribution

State redistribution fulfils three basic objectives: it creates funding for the production of public goods, it offsets failures of market distribution, and it improves equity of distribution. Equity of distribution may be improved through cash benefits, while price subsidies and benefits in kind may be used to remedy specific failures of the market.

The Hungarian welfare system is equitable but not sustainable

The Hungarian welfare system shows good performance from the perspective of reducing poverty, but it operates with low efficiency and cannot be sustained over the long term. The key reason is that benefits reduce willingness to work, resulting in high amounts of allowances being financed by a decreasing number of workers (taxpayers).

62 per cent of expenditure goes on welfare

Welfare expenditure accounts for 62 per cent of total public finances, and about one third of this is spent on social services. Leaving aside pensions, the largest expenditure item, one quarter of social spending involves price subsidies; the next largest is tax allowances, accounting for about 18 per cent; while only 5 per cent of social spending is allocated to means-tested benefits targeted at helping the poor.

Redistribution in its entirety operates at low efficiency

While it does significantly reduce income disparity, on the whole the benefit and tax system operates at low efficiency. A major indication of this is that some allowances are also awarded to the better-off, while for them, in relative terms, benefits do not mean a significant increase in income. The richer half of households receive a disproportionately large share of the total amount of support, and the poorest decile of households receive no more than the second poorest.

Targeting of social benefits is at average

A key objective of social policy is to reduce child poverty, and its main tool is family support. This

level, while targeting of price subsidies is poor

support is relatively well targeted, despite the fact that eligibility is not linked to income. At the same time, 23 per cent of the total amount spent on family support is received by richer households. The other key priority is to improve the condition of the poor. Although means-tested benefits (regular social assistance and housing benefit) are relatively well channelled to the poor, unjustified claims (i.e. overpaid amounts) are quite high. From among the various forms of support, tax allowances, the gas subsidy and preferential VAT give too much to the wealthier deciles.

Recommendations

Better targeting of benefits and tax allowances could reduce expenditure. Abolishing price subsidies, preferential VAT and tax allowances, as well as increasing well targeted cash and in-kind support, would improve efficiency.

1. Introduction

Redistribution has an impact on both the expenditure and the revenue side of general government. Through the collection of taxes and contributions, the state takes income away from individuals and other actors in the economy. If this were not done evenly across the board, some would have relatively more, and others relatively less disposable income than is justified by their economic performance. However, a significant part of government revenue is channelled straight back to the population in the form of welfare allowances and services. The share of benefits received by individuals is typically different from what would be justified by their tax payments: this is the redistribution impact on the expenditure side.

Redistribution basically serves three objectives: it creates funding for the production of public goods, it offsets failures of market distribution in order to maximize the volume of distributable goods, and it improves the equity of distribution. According to classical welfare economics, the state must intervene in areas where market failures occur.[1] Therefore, in addition to its political function and its role in maintaining public order, the state may perform duties that improve social welfare but that (for one reason or another) would not function, or would function only poorly, on a market basis.[2] Such state duties include education, the organization and funding of health insurance and health services, or the pollution tax, as these can improve current welfare standards or can expand sources for future welfare needs. In addition to providing public goods and offsetting market failures, a further task is to make income distribution fairer and more equitable.

Selection of the objectives and means of redistribution

Redistribution is efficient[3] if it is performed with the smallest possible distortion and with the lowest social expenditure. This can be achieved if its specific objectives are accomplished using the most suitable means. Allowances targeted at specific groups (e.g. the poor) are better provided through means that allow the government to determine the scope of the beneficiaries. For

---

[1] A market failure occurs if a basic condition required for the effective operation of the market is not fulfilled. These conditions are: market players (i) are fully informed, (ii) have nearly identical economic weights and regard prices as an external condition, and finally (iii) there are no external economic impacts (externalities), public goods or increasing returns to scale (Csaba and Tóth, 1999).

[2] It is questionable whether the state is indeed able to remedy the failure of markets, or whether such a function would cost more than the loss the state hopes to avoid (Pete, 2001).

[3] A solution is deemed efficient when it achieves the same result while consuming fewer resources.

instance, a price subsidy on children's shoes cannot be tied to customers' income, while free meals for children may be provided to poorer families only. If the government intends to encourage the consumption of particular goods (e.g. environment-friendly products, or education), the best means are those where the government has the opportunity to determine the scope of goods. The table below summarizes the basic scenarios.

Table 1 Main means of redistribution according to economic impact

	Who is the final beneficiary of the support?		**What product/service is purchased with the benefit?**	
	Decision of the government	**Decision of the individual**	**Decision of the government**	**Decision of the individual**
Cash benefit and income tax	x			x
Price subsidy and preferential VAT		x	x	
In-kind benefit	x		x	

Cash benefits are the most efficient means of equitable redistribution, because it is the beneficiary who decides how to use the money, and this tool best ensures the maximization of individual preferences. But because there is usually a need for separate administration of delivery, this tool may be costly. *Income taxes, too, are better at reaching* target groups than price subsidies, but they affect only those who have taxable income to begin with. *Price subsidies* limit the decision-making freedom of the individual and distort the operation of the market, as they benefit the manufacturers of specific products. This, therefore, is not an efficient tool to make redistribution more equitable, but it may be suitable to offset externalities. The *preferential VAT rate* differs from price subsidies only in that its administration is cheaper. Finally, *in-kind support*, which also limits the decision-making freedom of the individual, is efficient only if the goal is specifically to boost the consumption of a product or service (e.g. education or children's meals) and if such support is difficult to exchange for money or to reject.

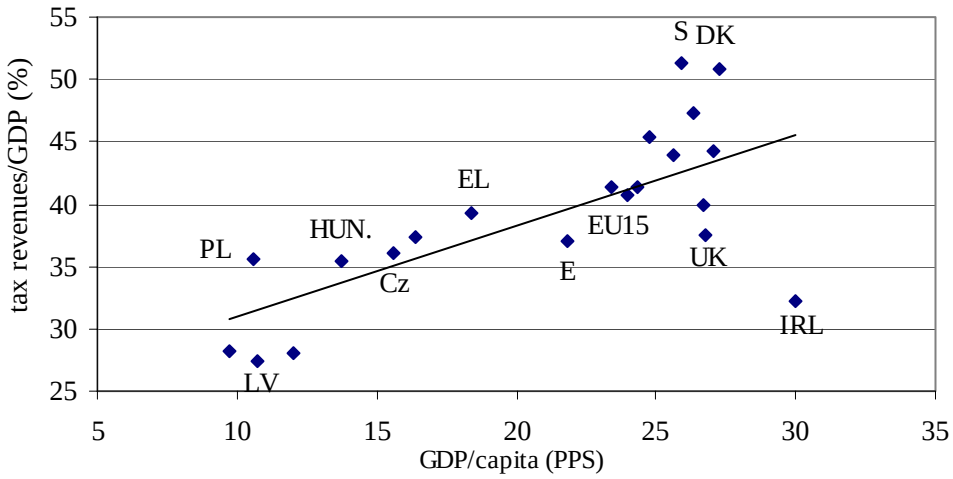
Among the elements on the expenditure side, in-kind and cash benefits may be awarded universally or on the basis of need. Allowances granted on the basis of need are well targeted and relatively cheaper. However, the associated costs are increased by a complicated needs assessment, which entails administrative costs and provides opportunities for abuse. Another problem is

that the support may not reach all those in need. Finally, income-based support can also have a negative impact on willingness to work (it can create a poverty trap).

The degree of redistribution in Hungary

An indicator of government redistribution frequently used is income centralization, i.e. the ratio of tax revenue compared to GDP. Examining that indicator, the size of government in Hungary is relatively small compared to the average of the EU-15, but it is large in comparison with the Baltic states. When examining EU member states, we see a positive correlation between per capita income and tax revenue: the wealthier a country, the higher its tax receipts (Figure 1). In Sweden and Denmark, where large welfare systems are operated, the state budget is relatively large, while the state budget in Ireland is very small compared to the country's level of development. As regards Hungary, tax receipts are more or less in line with the country's level of development.[4]

Figure 1 The ratio between tax revenues and aggregate income in the EU-15 member states and in six new members, 2004



Note: GDP/per capita (in 2004, PPS based) and total tax revenue as a percentage of GDP in 2004. Based on the database of EU AMECO.

Source: Benedek *et al*. (2004).

[4] For more on the trends of tax revenues and their international comparison, see Benedek *et al.* (2004) and Benedek *et al.* (2006).

Redistribution improving equity

In this paper we examine redistribution aiming at improving equity, and disregard the factors (adjustment of externalities, incentives) that influence the degree of welfare. Therefore, we shall look at the expenditure and revenue that are aimed at providing a fairer and more equitable income distribution across society (e.g. family benefit), and at the expenditure and revenue that have a significant impact on income reallocation (e.g. tax allowances).

Equity and fairness in themselves only imply some sort of consistent commitment to proportionate burdens and access to public goods. The selection of benchmarks regarding the ratios is a question of ideology. The various interpretations are usually consistent, in that by 'fairness' they mean equality; but they differ in whether that means equality before the law or equality according to merit or need.[5] Another important difference arises from the nature and extent of the role assigned to the state in the creation of equitable distribution.

At one end of the scale are *Marxist* and *socialist* theories, which set needs-based equality as a target, and are of the view that the state must assume a major role in creating fairness. At the other end is the *libertarian* approach, according to which the state need not intervene in market processes, as it is the market that creates fair (merit-based) distribution, compared to which government intervention can only be less efficient and therefore weakens standards of welfare. Between the two extremes are the *democratic socialist* approach, whose key goal is to establish equality, though it also assigns an important role to the market, and the *liberal* theory, which regards efficiency as the most important feature, but accepts government intervention if that is the best solution from the point of view of overall social welfare.

Hungary's government programme regards support for families with children and for the elderly as a key priority, and has declared the government's intention of increasing the role played by needs-based benefits (New Hungary, 2006). Based on the above, the current government's interpretation of fairness is closest to the democratic socialist theory.

This principle of needs-based benefits supplies the focus for our paper, i.e. we are going to examine to what extent the overall redistribution system and its individual elements are able to ensure that poorer people receive more support, and richer people less.

In a number of respects, the study is limited due to a lack of available data. Some types of benefit are not supported by any data (e.g. pensioner travel

[5] A good summary of fairness theory is given by e.g. Pierson and Castles (2000) or Barr (1998).

allowance or tax-exempt incomes), while in the case of others, data at the individual level do not exist or are not available (e.g. subsidies on medicines).

First, the study will review the state budget structures of welfare models, along with the types and volume of major revenue and expenditure items. As a next step, we shall present the redistribution impacts that the elements of the tax and benefit system have on household income: on the revenue side we shall take a closer look at direct and indirect taxes, and on the expenditure side we will examine universal and means-tested cash benefits, tax allowances and the gas price subsidy. Finally, based on the results of the analyses presented in the study, we shall formulate recommendations regarding modification of the structure of welfare expenditure.

2. Welfare models in Europe

The EU member states may be divided into four categories by the size and structure of their welfare systems: (1) liberal, (2) Scandinavian, (3) conservative, or (4) southern European models (Esping-Andersen, 1990; Sapir, 2005). Aside from the size of the state budget, there are differences between the various models in terms of their selection of tools – i.e. the relative significance of income-based/universal, cash/in-kind benefits, and of various tax types and contributions.

In the United Kingdom, which belongs in the liberal category, there is a strong emphasis on the responsibility of the individual and on market mechanisms. As a result, welfare spending is low, as are receipts from tax and contributions, and welfare service providers are often market players. In the social benefit system, means-tested and targeted benefits play a major role. The range of beneficiaries is narrow, but the standard of the benefits is relatively high.

Scandinavian countries generally seek to increase employment levels and to reduce income inequalities. Universal benefits are typical, and the number and significance of income-based transfers are relatively small. The bulk of services come from the public sector, and this results in a high ratio of in-kind (non-cash) benefits.

The main feature of conservative welfare systems is a broad social security system. The rate of social security contributions is fairly high for both employees and employers, and so is the associated government revenue. Welfare benefits are mainly provided in cash, rather than in kind. With widely available welfare benefits, income-based support is of average significance.

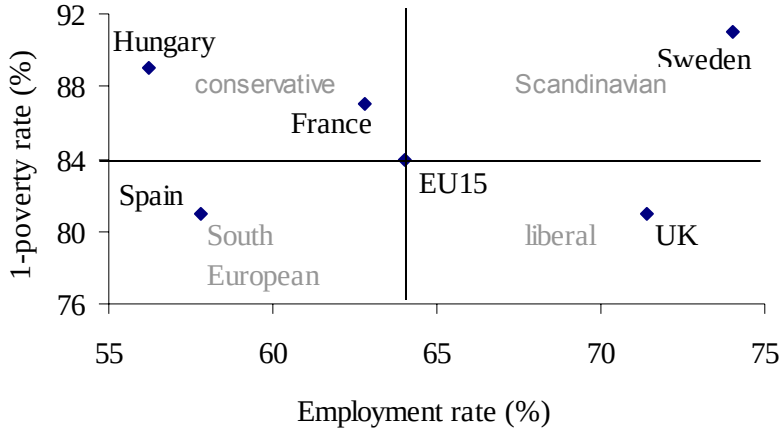
The typical feature of southern European countries is that they have undeveloped welfare states, and eligibility – although determined centrally – is often difficult to enforce at the local level. The major part of benefits is tied to income, further regulated by many additional criteria (e.g. in Spain, no two

adults from the same family may receive social aid). Relatively few people receive benefits, and benefit amounts, too, are low. Consequently, state spending both on welfare and on social services is low.

Sapir (2005) examines European welfare systems according to two criteria: social fairness and sustainability. He uses risk of poverty as an indicator of social fairness or equity. He measures sustainability through the level of employment: if appropriate incentives for work exist in a welfare system, and if the employment level is high, then sufficient revenue is generated to sustain the system. These are the two criteria in Figure 2 that serve as the basis for the classification of European countries, where risk of poverty is measured by the ratio of those living in permanent poverty,[6] and employment is measured by the employment rate of 15–64-year-old population.

From the perspective of reducing poverty, the Scandinavian and the conservative models perform well, but only the Scandinavian model has proved to be sustainable in the long term, i.e. efficient. The conservative model's low level of efficiency is mainly due to the fact that benefits reduce willingness to work, resulting in high amounts of allowances being financed by a decreasing number of workers (taxpayers). The figure below reveals that Hungary belongs to the conservative group, where welfare systems cannot be sustained over the long term.

Figure 2 Models of welfare systems in the European Union



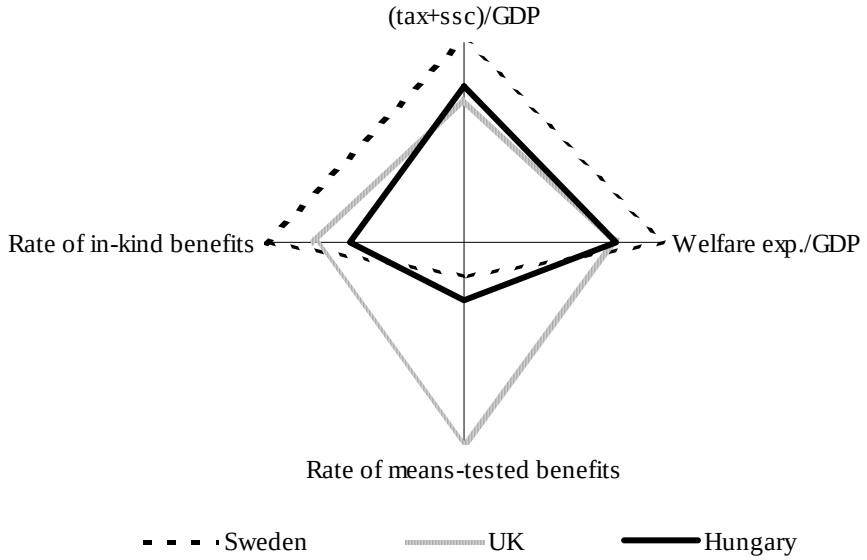
Source: own calculation based on Sapir's (2005) idea and on Eurostat data.

The question arises, then: if the conservative model is not sustainable, what model should Hungary move towards, and what direction should the

[6] In addition to those used here, other inequality indicators, such as the Gini indicator, lead to similar results.

country take? Figure 3 presents the relative positions of two efficient countries – Sweden and the United Kingdom – and Hungary, according to four variables that describe the extent and the structure of redistribution.

Figure 3 The structure of tax revenues, welfare and social spending in Sweden, the United Kingdom and Hungary, 2003



Note: the indicator is 1 for the country with the largest value, and the other countries are positioned on the axis in proportion to that.

Source: own calculation based on Eurostat data.

In order to achieve the Scandinavian model with the current level of tax and GDP, the proportion of in-kind benefits within welfare spending should be increased. To move closer to the liberal model, Hungary should increase the proportion of income-based and in-kind benefits, while maintaining the existing level of welfare spending. However, the latter model may lead to an increase in income inequality, which may run counter to the preferences of the Hungarian electorate.

3. The macro structure of welfare expenditure and the state budget

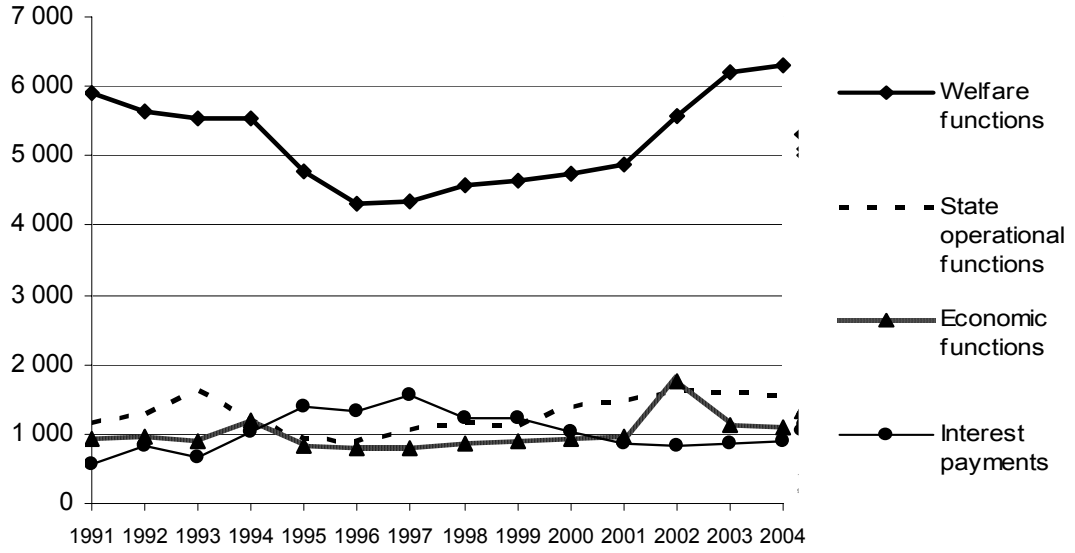
In this paper we shall examine the revenue and expenditure of the state budget from the perspective of equity. Accordingly, on the expenditure side we are going to take a closer look at welfare spending, focusing on welfare expenditure that serves a social purpose; and on the revenue side we shall look at receipts from tax and contributions. First, we are going to review how much

of the central budget is spent on income redistribution for social purposes, and what the main delivery tools are.

State budget expenditure

In Hungary, state budget expenditure accounted for almost 52 per cent of GDP in 2004. Expenditure serves (1) state operational, (2) welfare, (3) economic and (4) public debt management functions. The real value of expenditure across these four categories showed significant swings in the period 1991–2004 (Figure 4). Spending on the welfare function[7] increased in real terms after 1997. This was primarily due to the stabilization package introduced in 1995, which resulted in a drop in the interest payment associated with government debt, which in turn created the opportunity to increase welfare spending. From 1997, education, social security and social expenditure grew significantly. The increase in welfare spending was especially significant in 2002, and was mainly attributable to an increase in the salaries of state-sector employees, and to the withdrawal of certain limits introduced earlier (e.g. those relating to family support).

Figure 4 Major expenditure items at unadjusted 2004 prices, 1991–2004 (HUF billion)



[7] The welfare function includes education and health care, and the social security, social and welfare services.

Source: Benedek *et al.* (2006).

In 2004, welfare expenditure accounted for 62.2 per cent of the total state budget (Table 2). Over and above that amount are certain company subsidies that serve welfare purposes too, but are recognized in the statistics as economic functions. The actual degree of redistribution is also increased by welfare tax allowances granted to private individuals, which are omitted totally from the accounts of the state budget. When these are added, more than one third of welfare expenditure is spent on social purposes, such as the poverty alleviation.

Table 2 The proportion of state expenditure on welfare in 2004

	HUF billion	As a share of the total state budget, %	As a share of expenditure, including tax allowances, %	As a share of GDP, %
Welfare function *	**5 924.3**	**62.2**	**58.0**	**29.1**
Company welfare benefits	**182.2**	**1.91**	**1.84**	**0.9**
Tax allowances	**398.1**	**4.18**	**4.01**	**2.0**
Welfare spending total	**6 504.6**	**68.29**	**65.55**	**32.0**
Of which: *on social purposes **	*2 245.2*	*23.57*	*22.63*	*11.0*
pension	1 678.9	17.63	16.44	8.2
education***	1 182.5	12.42	11.92	5.8
health care***	1 112.2	11.68	11.21	5.5

* according to the GFS classification
** without pension
*** ESA95 data
Note: the table includes both cash and in-kind benefits.

Source: Ministry of Finance.

We consider benefits to be fulfilling a social function if they increase the income or consumption of poorer or disadvantaged social groups. Such benefits include the regular social assistance or free public health care. Family benefits,

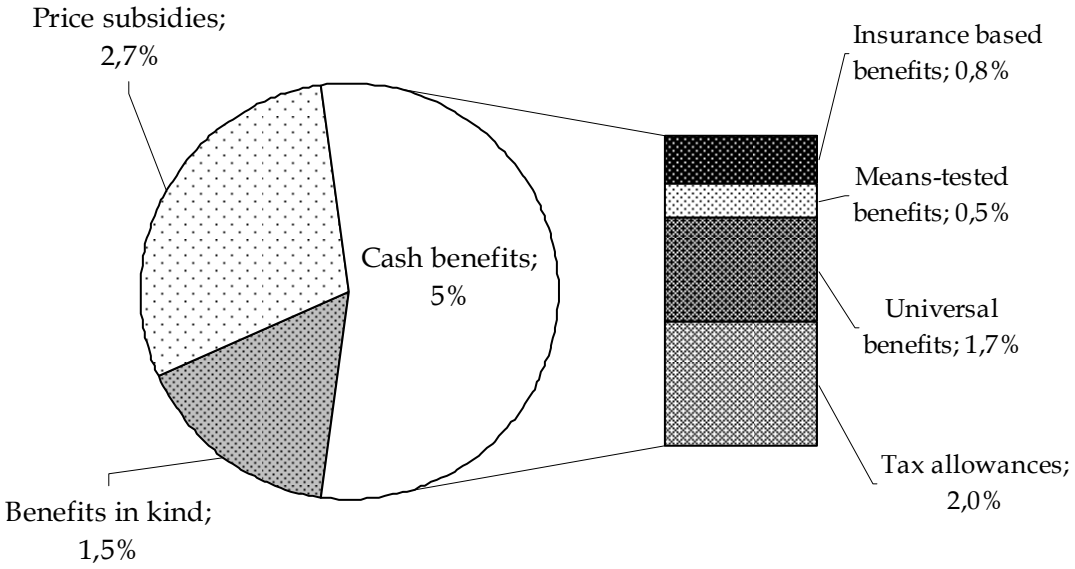
too, including the family tax allowance, fall into this category, based on the consideration that studies on poverty conducted in Hungary have revealed that having children significantly increases the risk of poverty, and therefore children, too, form a target group for social policy. This category does not include public services that are universally available, such as health care services or education. While these do, in fact, constitute welfare expenditure, they are not exclusively targeted at supporting disadvantaged groups.

Although items enjoying preferential tax treatment and the exceptions in the tax system are not recognized as welfare expenditure, they do fulfil a welfare role and have an impact on redistribution, and therefore we look at the size of these items, too (for a list of exceptions and allowances related to the tax system, see Appendix F2).

Although, in theory, old-age and disability pensions operate on an insurance basis, they do have significant redistribution implications, because the state budget uses tax revenue to offset the deficit in the pension fund. Pensions account for almost the same amount annually as cash and in-kind social benefits combined (see Appendix F3), and 15–20 per cent of pension expenditure is financed from the central budget. According to Orbán and Palotai (2005), the pension system's long-term net implicit liability (the present value of the balance of contribution payments and pension disbursements) amounts to 240 per cent of GDP, which is almost four times the value recorded after the pension reform of 1997–98. This significant deterioration is due to the 13th-month pension, introduced since the reform, and to a series of cuts in pension contributions.

The Hungarian welfare system provides social benefits in three ways: cash benefits, benefits in kind and price subsidies. The bulk of social expenditure occurs through cash benefits tailored to a particular objective, though these include a very low proportion of benefits based on need and income (Figure 5). Also, the proportion of price subsidies – a tool much less suited to achieving social objectives – is significant and, as we shall see, this is the area in which efficiency could be most enhanced.

Figure 5 Social expenditures and their ratio compared to GDP, 2004



Note: the relevant Forint data are included in Appendix F3.

Among social benefits, the largest amount is spent on medicine price subsidies: in 2004 this accounted for more than HUF 330 billion. This is followed by employee tax allowance (HUF 238 billion in 2004) and family support (HUF 186 billion). Benefits with an annual amount in excess of HUF 25 billion account for almost 68 per cent of all social benefits (Table 3).

Table 3 Social benefits with an amount in excess of HUF 25 billion, in 2004

	Amount (HUF billion)	As a percentage of social benefits	As a percentage of GDP	Number of beneficiaries (thousand people)
Benefits to the ill and the handicapped				
Medicine price subsidy	332.0	14.8	1.6	-
Support for the employment of people with disabilities	64.1	2.9	0.3	-
Allowances to people with disabilities	64.4	2.9	0.3	232
Benefits to families with children				
Family support*	185.5	8.3	0.9	2 100
Family tax allowance*	80.7	3.6	0.4	987
Child care allowance (GYED)	54.5	2.4	0.3	84
Child care grant (GYES)	48.7	2.2	0.2	163
Regular child protection benefit*	43.4	1.9	0.2	675

Home purchase benefits				
Interest relief on mortgage bonds	90.8	4.7	0.5	63.4
Supplementary interest relief	36.3	2.0	0.2	
House construction allowance (social policy allowance)	33.3	1.7	0.2	
Travel benefits				
Support for the operation of state railway passenger transport	52.0	2.3	0.3	-
Long-distance coach service	45.0	2.0	0.2	-
Subsidy towards local public transport	34.0	1.5	0.2	-
Railway subsidy	25.0	1.1	0.1	-
Other social benefits				
Employee tax allowance and supplementary tax allowance	238.7	10.6	1.2	2 900
Gas price subsidy	43.8	2.0	0.2	-
Regular social assistance	27.0	1.2	0.1	147
Amount	***1 499.2***	***68.1***	***7.4***	**-**
Total benefits (including those with amounts less than HUF 25 billion)	**2 245.2**	**100.0**	**11.0**	**-**

* Due to the changes introduced in the family benefit system after 2004 (when both the regular child protection benefit and, in part, the family tax allowance were merged into the family support), the budget plan in 2006 for family support is HUF 318 billion, for family tax allowance HUF 13 billion, and for the regular child protection benefit HUF 0.

Source: Ministry of Finance.

Tax-related allowances

In this section we review income categories subject to preferential tax treatment (see also Appendix F2). Some tax allowances do not (or do so only partially), serve social functions, but their presence in the system has a significant impact on redistribution. Preferential treatment takes four forms:

1. the tax allowance applies to the taxpayer, on the basis of specific criteria;
2. the particular source of income is tax exempt, but if the individual has other income too, it must be declared on the tax return and it will increase the average tax. This category is referred to as 'tax-exempt benefit';
3. the particular income is not taxed according to the standard tax table, but special considerations or tax rates are applied;

4. the particular income is tax exempt, and does not have to be declared on the tax return.

Preferential treatment may be granted in light of the following considerations:

⇒ *no income should be double taxed by the state:* a number of welfare benefits are based on contributions paid earlier, which were paid from taxed income. To tax such income again, therefore, would mean double taxation. In this respect, Hungarian statutes are not consistent, because pensions and unemployment benefits are tax exempt, while child care allowance, sick pay and the pregnancy and confinement benefit are taxable and enjoy no tax allowances whatsoever.

⇒ *reduction of the administrative burden:* tax exemption of social benefits is justified by a reduction in administration: significant administrative costs would be incurred by the state budget if benefits were first disbursed and then partly clawed back in the form of tax. However, the legislation is again contradictory, because the child care grant and the GYET (child care benefit) are included in the tax return as tax-exempt benefits, but other social benefits are not.

⇒ *encouraging particular behaviour* (e.g. saving up or entering employment), and improving the income situation of certain social groups. Behind some of the allowances in this category lie not social policy or economic considerations, but rather lobby interests or political goals. Examples include employee tax allowance, or allowances for the repayment of subsidized housing loans.

Reliable information regarding the use and the volume of tax allowances is available for the first three preferential categories, but in some cases information is limited. For instance, only those who have other taxable income are required to declare tax-exempt benefits on their tax returns. With preferentially taxed income, too, it may be that, if an individual's earnings do not exceed a low limit, the income does not have to be declared (e.g. in the case of income from primary farming production). However, the tax authority has no information whatsoever about non-taxable income.

The state budget forgoes at least HUF 450 billion of revenue[8] per year through tax allowances. According to our estimates, the annual amount of tax-exempt benefits is at least HUF 86 billion. Those that have only such income do not need to file a tax return or pay tax, and therefore we also use other data sources in estimating this item (see Table 4).

[8] Excluding the revenue shortfall due to the reduced tax on income subject to preferential tax rates. We do not try to estimate that item in this paper.

Table 4 Tax on tax-exempt benefits and the number of beneficiaries

	2006 (forecast)	2005 (forecast)	2004 (actual)	2003 (actual)	2002 (actual)
Tax-exempt benefits declared on tax returns (HUF million)	n.a.	n.a.	69 705	67 021	58 580
Tax on tax-exempt benefits as per the tax table (HUF million)	18 993	18 621	17 974	18 942	16 628
Number of beneficiaries	n.a.	n.a.	186 336	186 167	182 654
Tax exempt benefits total* (GYES+GYET+stipendium) (HUF billion)	n.a.	n.a.		86	

Note: The list of tax-exempt benefits is attached in Appendix F2. The most significant are GYES, GYET, foster parent benefit, nursing benefit and benefits payable to full-time students (e.g. stipendium, benefit for textbook purchase and housing).

*Minimum estimate, but includes income not declared on tax returns.

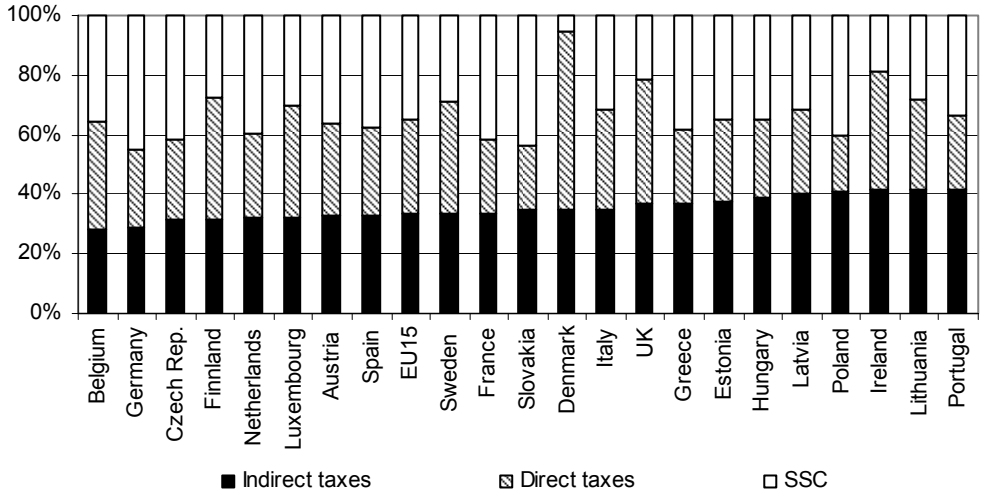
Source: Tax Authority and Ministry of Finance.

Tax revenues

Taxes and contributions are the most significant revenues in the state budget, both in terms of volume and their impact on the economy. Different tax types may have different redistribution impacts. In the case of direct taxes, the principle of equal treatment is easier to enforce, and through allowances the government is able to provide targeted support to specific groups. In the case of indirect taxes, it is up to the consumer to decide what products he wishes to buy, and therefore allowances provided through such taxes are less suited to supporting specific target groups in society.

In Hungary, the weight of indirect taxes is relatively high, accounting for nearly 40 per cent of tax receipts. That is regarded as high compared to EU member states, while the proportion of direct taxes is relatively low (Figure 6).

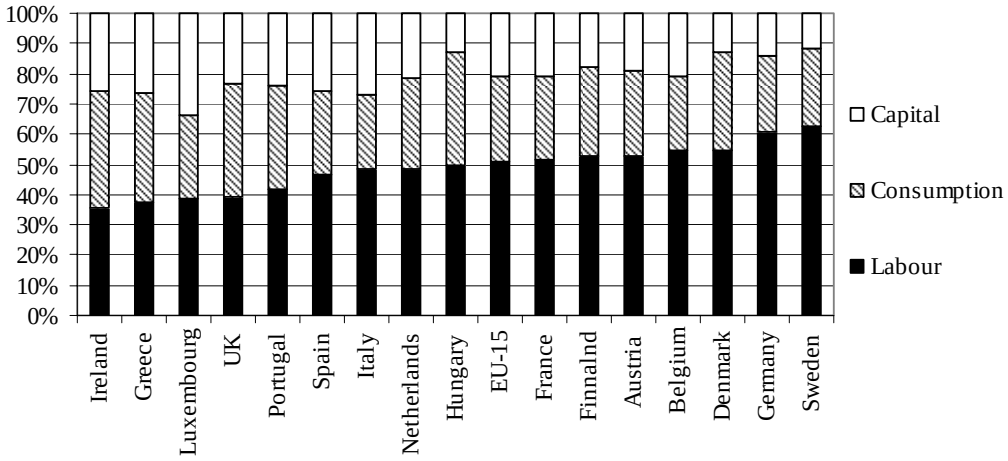
Figure 6 Tax receipts according to tax type as a percentage of total tax receipts in the EU-15 member states and in seven new members, 2004



Source: Benedek *et al.* (2006).

Tax regimes across the EU member states are very different. However, it is clear that in Hungary the proportion of tax revenue from capital income is low compared to almost all other countries, while receipts from tax on labour is average. It is important to emphasize, though, that aggregate data do not provide information about the tax burden at the level of the individual, because there can be significant variations between countries in terms of the proportion of active population. With the same aggregate tax burden, the per capita tax payment is lower if the number of active workers, and therefore the number of taxpayers, is higher.

Figure 7 Tax revenues from labour, capital and consumption as a percentage of total tax revenue, 2002



Source: Benedek *et al.* (2004).

4. The targeting of redistribution

As we indicated in the introduction, in this paper we are looking at those redistribution elements of the state budget whose purpose is to achieve a higher level of social equity. The government programme identifies poorer people and families with children as target groups for its social policy, i.e. the government wishes to improve equity by supporting those groups. When evaluating social expenditure, we focus on its contribution to achievement of these two goals. To this end, we shall review the extent to which the various benefits, tax allowances and taxes reallocate earnings from richer income groups to poorer or disadvantaged people, and the efficiency of that reallocation. We define efficiency as achievement of the desired level of redistribution at the lowest possible cost. One way of ensuring this is to use well-targeted benefits, while another is to keep the administrative costs of benefits to a minimum.

We consider a benefit to be well targeted if a significant part of it reaches the target group, in this case the poor or families with children. Two types of problems may emerge in connection with targeting benefits: underpayment and overpayment. Underpayment occurs when the benefit does not reach all who are in need, while overpayment means that those not in need also have access to a benefit. It is up to the judgement of decision makers which one is considered more important. There is typically less overpayment with means-tested benefits, while universal benefits are less likely to fail to reach eligible individuals.

Micro-level data are required to examine the targeting of benefits. In evaluating the redistribution impact of the individual items of the state budget we rely on analysis available in the literature (microdata-based analysis), on our own calculations prepared on the basis of the Household Budget Survey of the Central Statistics Office (CSO), and on the results of tests carried out using the microsimulation model[9] of the Ministry of Finance.

In contrast to calculations prepared for 'typical' groups (e.g. those earning a minimum wage, or two-child families), the microsimulation model also facilitates an impact assessment that covers every significant demographic group. And, compared to income studies based on population surveys, the model takes a somewhat wider view of the benefit system, because it includes

[9] The TÁRSZIM 2005 model is a product of TÁRKI and the software was developed by VirgoSystems Ltd. The production of the model was funded by the Ministry of Finance and the Ministry of Youth, Family, Social Affairs and Equal Opportunities. The databases of the tax authority APEH, the CSO and TÁRKI were used during production of the model.

some tax allowances and in-kind benefits that are typically not taken into consideration in the population surveys.[10]

It is important to note that, from among the elements of the social and family support system, we primarily examine cash benefits, in particular those not based on insurance, i.e. universal and means-tested benefits, and in some cases – where indicated – social tax allowances. Due to the absence of data, we do not examine the targeting of in-kind benefits, and, of the various price subsidies, we consider only the redistribution impacts of the gas price subsidy.[11]

The overall redistributive impact of the tax and benefits system in 2006

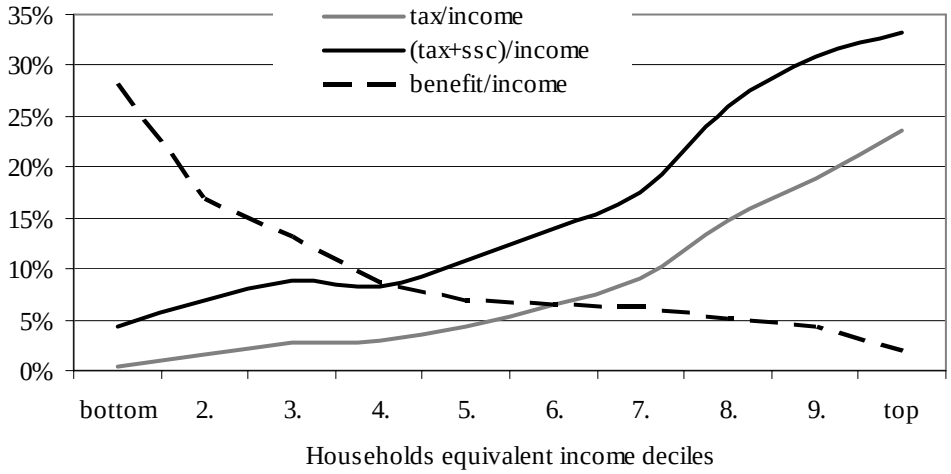
In spite of its paramount importance in evaluating social policy, so far as we are aware there has been no comprehensive study done in Hungary on the overall redistributive effect of the tax and benefits system.

According to our calculations, prepared using microsimulation, significant income reallocation is to be found among households if tax liabilities and benefits received are also taken into consideration. The poorer half of households pay less tax as a percentage of their disposable income than they receive in the form of government benefits (Figure 8). If, however, we also recognize social security contributions, then those on an average income become net contributors to the system. It is also worth noting that, although the richer one third of the population receive a significant slice of the total amount of benefits (see Figure 9), these benefits account for only 2–5 per cent of their income.

[10] Because in Hungary there is no database available including income, tax, consumption and household data, the model's data set was merged from three databases: the data from the TÁRKI Monitor for 2003, the 2003 data of the CSO Household Budget Survey, and the tax authority's (APEH) personal income tax return data for 2003. In the case of analyses not related to 2003, we used multipliers to modify the base parameters. For more details on the data, see TÁRKI (2005).

[11] For further details on microsimulation method, see Benedek and Lelkes (2005).

Figure 8 Tax payment (personal income tax), social security contributions and benefits as a percentage of disposable income, households, 2006[12]

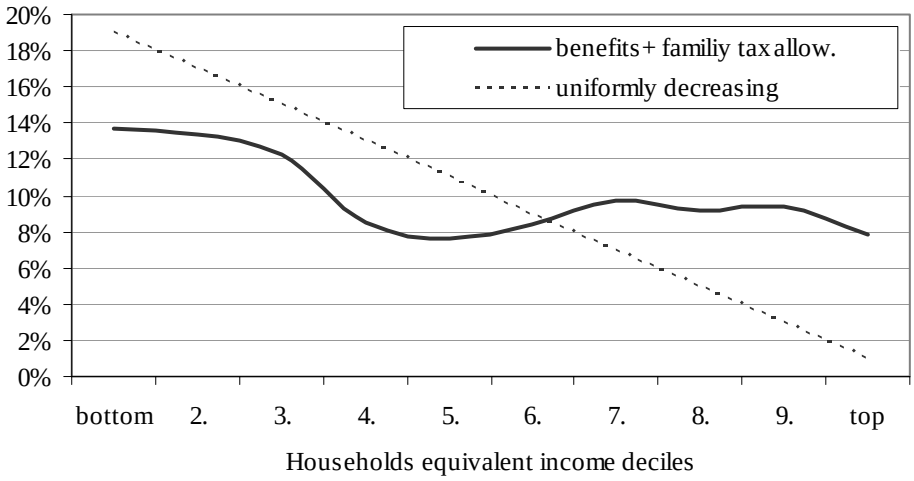


Source: TÁRSZIM 2005.

In Figure 9 we compare the actual distribution of benefits to a hypothetical distribution that follows a straight-line decrease. This flat distribution gives the most to the poorest decile, and, although there is a gradual decrease, it gives some benefits to every income group in order to ensure continuity. The figure clearly illustrates that the richer half of the population receives an unfairly large share of the total amount of the benefits (plus the family tax allowance): each of the upper five deciles receives about 8–10 per cent. It is also striking that the first and second deciles receive more or less the same percentage of the benefits.

[12] In certain cases, we calculate the per capita income within households on an equivalent basis. This means that we divide the household income not by the number of household members, but by a smaller number. The reason is that economy of scale is a factor in the consumption of household goods, i.e. households with more people do not need a proportionately higher income to maintain the given standard of living. On the whole, therefore, we must take into consideration that a household with more members will not have proportionately larger expenses, and thus incomes do not need to be proportionately larger either.

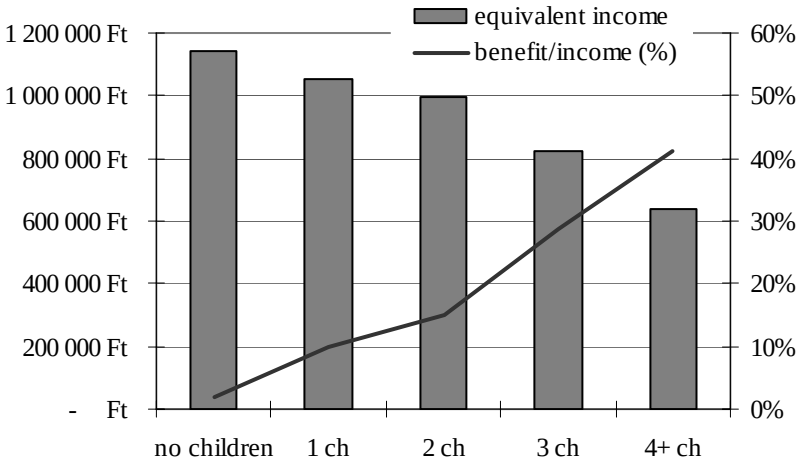
Figure 9 The distribution of the total amount of benefits plus the family tax allowance across income deciles, 2006



Source: TÁRSZIM 2005.

A key target group in the government's redistribution policy is families with children. This group is reached adequately, because families with children receive more benefits in relation to their income than do families without children; in particular, the per capita benefit grows as the number of children increases; and also the proportion of benefits in the family income rises in line with the number of children (Figure 10).

Figure 10 Per capita income and the proportion of benefits in income according to the number of children, 2006



Source: TÁRSZIM 2005.

Targeting of elements in the benefit system

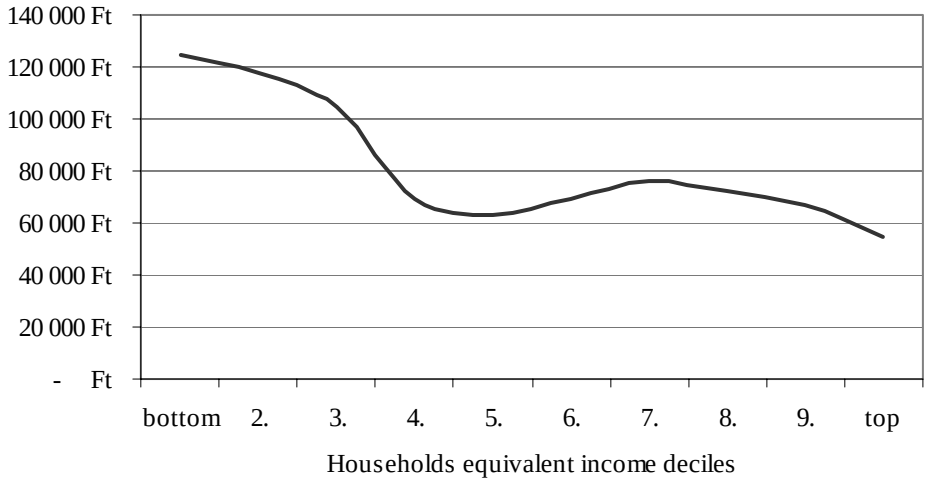
The elements of the benefit system may be grouped into three categories: universal benefits, means-tested benefits and tax allowances. Universal benefits, and in particular family support, have the greatest proportion. The second most important group is social tax allowances, which includes employee tax allowance and family tax allowance. The importance of means-tested benefits that specifically target the poor is quite low compared to the other two benefit groups.

Universal benefits

The most significant element in the family benefit system is the universal family support. In 2004, family support amounted to a total of HUF 185 billion, but, due to changes subsequently introduced in the benefit system, in 2006 the amount is expected to reach HUF 316 billion. According to earlier analyses, family support is relatively well targeted, despite the fact that eligibility is not based on income. The reason is that, in Hungary, families with children typically belong to poorer households. According to Havasi (2005), it is especially families with many children that are at high risk of poverty, which is significantly mitigated by the family benefit system. According to Tóth (2005), the efficiency of targeting family support improved steadily from the early 1990s to 1997, after which it remained at more or less the same level. According to his calculations, in 2003 about 35 per cent of all family support was distributed to the poorest income quintile, as against 29 per cent in 1995. Based on Mózer's (2002) calculations performed on CSO Household Budget Survey data, the bottom income quintile receives 33 per cent of family support; at the same time, though, the upper income quintile's share of family support increased from 13 per cent in 1998 to 20 per cent in 2002.

The results of the calculation prepared on the basis of microsimulation are in accord with previous analyses: the amount of family support is highest in the three bottom deciles (Figure 11). However, it can also be seen that, although family support provides much more to poorer families, the amounts received by richer families is also substantial.

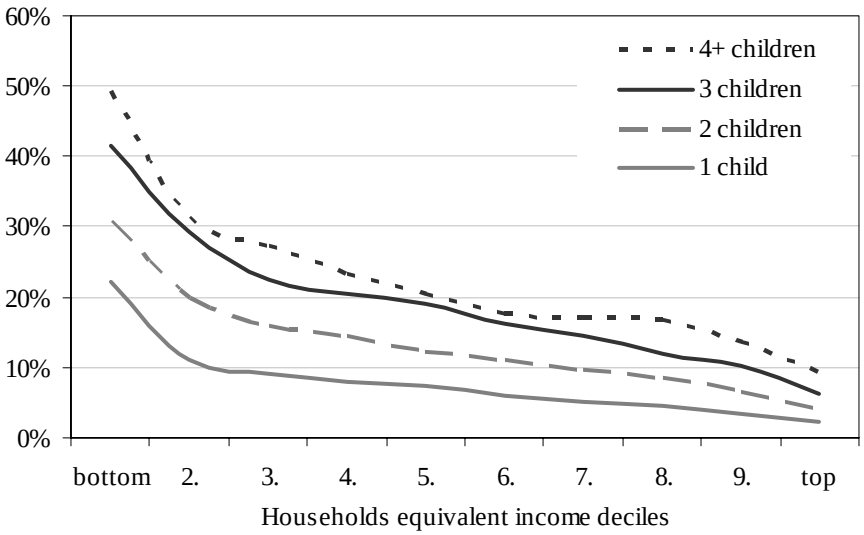
Figure 11 Average use of family support per household, by income decile, 2006



Source: TÁRSZIM 2005.

The relevance of family support within disposable income changes not only with the household's income situation, but also with the number of children. As most families with three or more children are in the lower half of the income distribution, family support can be relatively well targeted by differentiating according to the number of children (Figure 12).

Figure 12 The ratio of family support within income, according to the income situation and the number of children, 2006



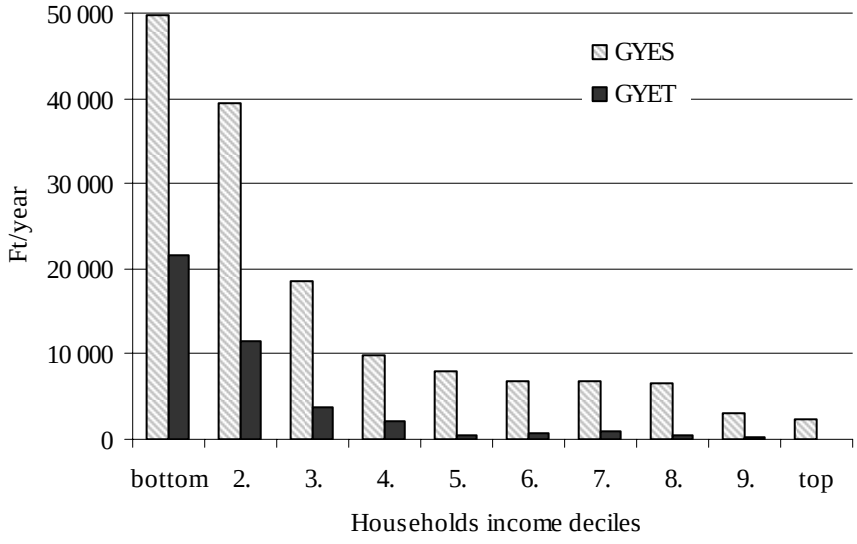
Source: TÁRSZIM 2005.

Maternity benefits: GYES and GYET.

According to Tóth (2005), in 2003 about 35–40 per cent of the total amount of maternity benefits and family support, and almost half of all benefits, was received by the lowest income quintile. 'Therefore claims that welfare benefits are not appropriately targeted are no longer valid' (Tóth, 2005: p. 3). At the same time, there is an increase in the benefits received by the top decile. According to Mózer (2002), the distribution of maternity benefits has widened: the share of the lowest income quintile has grown by 2 per cent, while that of the top income quintile has increased by 5 percentage points, from 9 to 14 per cent.

Data from the CSO Household Budget Survey for 2003 reveal that, although the child care grant[13] (GYES, provided up to the age of 3) and the child care benefit (GYET, provided after the age of 3, to full-time mothers) are not means-tested benefits, a significant share of both is received by the poorest 20 per cent, and the share going to the top two deciles is almost negligible. The primary reason is that the upper deciles are typically eligible for the insurance-based GYED, which, in their case, replaces GYES. GYES and GYET are identical in amount (they equal the minimum pension), and thus the difference seen in Figure 13 is purely due to the fact that there are about three and a half times as many people receiving GYES as GYET.

Figure 13 Average household income from GYES and GYET, according to income deciles, 2003



Source: own calculation based on data from the CSO Household Budget Survey.

[13] The maternity benefit, GYES and GYET are social benefits provided to all citizens. Additionally, there are insurance-based maternity benefits, GYED and TGYÁS, which we do not discuss in this paper.

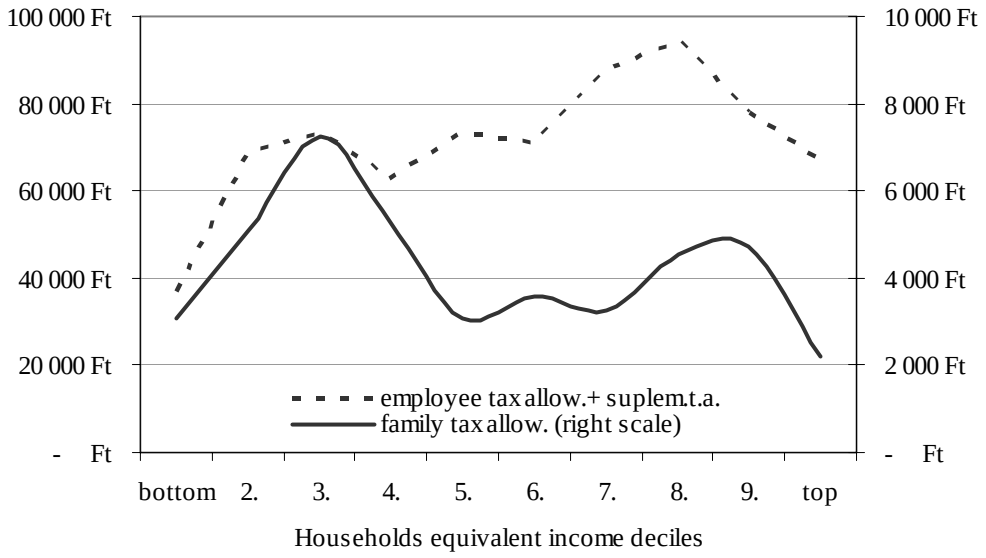
Tax allowances

Of the tax allowances, employee tax allowance and family tax allowance serve social functions. Employee tax allowance reduces the actual amount of tax payments, and the resulting shortfall in revenue came to about HUF 238 billion in 2004. Based on data from APEH's tax returns, Tóth (1997) showed that as income grows the amount of tax allowance claimed increases. In 1994, 58 per cent of tax allowances were claimed by the top 20 per cent of taxpayers, and the figure was similar in 1996. Contrary to expectations, the greatest use of tax allowances, as a share of income, was made not by the richest, but by the third decile (Tóth, 1997).

We arrive at a similar result on the basis of the microsimulation analysis. The amount of tax allowances increase in line with income in the poorest three deciles, and shows a significant decrease only in the top quintile (Figure 14). The reason for this is that the poorer groups do not have taxable income and, although a higher level of taxable income gives greater scope for writing off tax, the maximum amount available for tax allowance decreases above a certain income level.

The lower take-up of allowances in the middle of the income distribution is due to a higher rate of pensioner households with no work income (see the section on *Pensions* below), not eligible for this form of benefit.

Figure 14 Average amount of employee tax allowance (together with supplementary tax allowance) and of family tax allowance per household, by income decile, 2006



Source: TÁRSZIM 2005.

Regulation of family tax allowance has been fairly eventful over the past two decades. It was terminated by the Bokros austerity package, only to be reintroduced by the new government in 1998, with a monthly amount equal to 50–60 per cent of family support (Ferge and Juhász, 2004). In 2004, the total revenue shortfall due to the family tax allowance was about HUF 80 billion, but the plan for 2006 is only HUF 13 billion, as families with one or two children are no longer eligible.

Earlier analyses do not make clear who receives family tax allowance. According to some estimates, 17 per cent of families do not have access to it at all, and a further 10–20 per cent only make partial use of it. However, Ferge (2001), for instance, debates those figures on the basis of aggregate data, and comes up with a much lower estimate of take-up.

On the basis of data from APEH for 2002, Darvas and Mózer (2004) found that 86 per cent of tax-paying families used the allowance in full, and 14 per cent used it in part. However, 17 per cent of all families with children do not have taxable income, and therefore they do not receive any of this benefit. This is a problem, because use of the allowance shows a positive correlation with the income situation, i.e. the direction of redistribution is negative (inverse). In addition, Darvas and Mózer (2004) found that it is mainly families with one or two children that claim the tax allowance.

A similar result is produced by the microsimulation analysis. Like employee tax allowance, family tax allowance also fails to reach the poorest decile, since people in this category do not have a sufficient level of tax liability that they can offset using the tax allowance (Figure 14). However, this benefit gives less to the richer half of the distribution, as people with three or more children – those currently entitled to this tax allowance – typically belong to the poorer households in terms of income per capita.

Means-tested benefits

The advantage of means-tested benefits linked to income is that – being available to a smaller circle of beneficiaries – in theory, they are cheaper and have a larger impact on redistribution and on income reallocation than universal benefits. The drawback is that – in addition to having higher administrative costs and a potential stigmatizing effect – they are imperfectly targeted: there are non-eligible recipients, while those that would, in fact, be eligible to receive such benefits are not always reached.

Kőnig (2004) reports a decrease in the role of means-tested benefits, demonstrating that both the range of beneficiaries and the expenditure in real terms on such benefits decreased between 1998 and 2002. A key reason is the relative decline in the value of the income threshold of eligibility: wages and

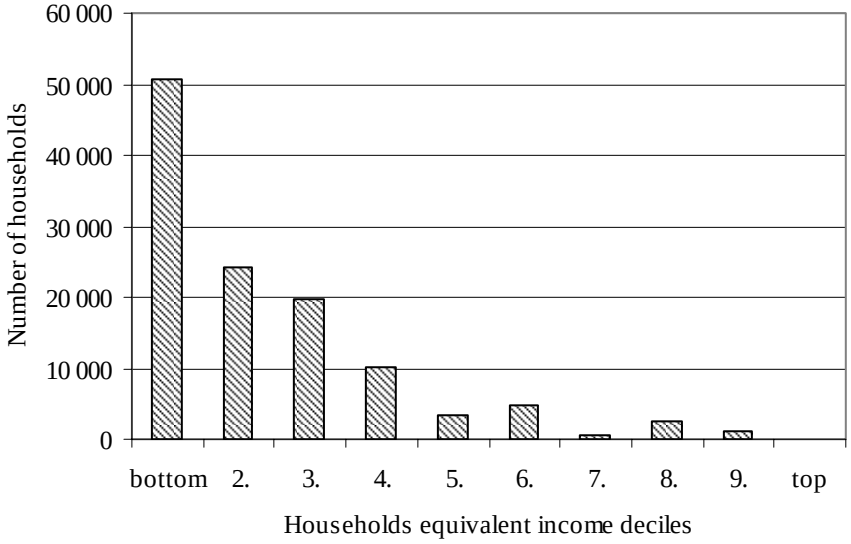
pensions increase at a higher rate than the minimum pension, which serves as the threshold for most means-tested benefits. Due to the low eligibility limit, a large proportion of the poor have no access to the benefit: according to various calculations, the ratio of poor people receiving this benefit is as low as 20–40 per cent. In other words, means-tested benefits are not well targeted, as they fail to reach the majority of poor families. According to Mózer (2002), underpayment decreased between 1998 and 2001; the share of the benefits received by the bottom income quintile grew from 24 per cent to 50 per cent, and thus the benefit has become significantly better targeted.

Regular social assistance

Firle and Szabó (2006) examined the targeting of the regular social assistance granted to the unemployed,[14] being the most significant means-tested benefit that exists today. According to data from the CSO Household Budget Survey for 2003, the benefit's take-up rate (the ratio of beneficiaries to eligible people) is 55 per cent. Some 83 per cent of beneficiaries come from the poorer third of households (Figure 15), i.e. the benefit may be regarded as well targeted. Being well informed and having a strong link to the labour market are the factors that have the greatest bearing on the likelihood of someone taking up the benefit. Among people with higher educational attainment levels, the ratio of recipients is significantly lower than the ratio of eligible people, which is partly attributable to the stigmatizing effect of the benefit (Firle and Szabó, 2006).

[14] Although the conditions for the benefit are centrally regulated, eligibility is established and the benefit is disbursed by local governments. According to the law, active non-employed people are eligible to receive the regular social benefit if their personal income is below 70 per cent of the minimum pension, and if their household has a per capita income below 80 per cent of the minimum pension. In 2003, the monthly average amount of the benefit was HUF 15,000.

Figure 15 Distribution of recipients of the regular social assistance, 2003



Source: Firle and Szabó (2006)

The eligibility threshold is at the upper limit of the second decile, and thus the figure also reveals that a significant proportion of the recipients (approx. 30 per cent) were not entitled to receive the benefit. In 98 per cent of cases, the reason for this is that income per capita in the household exceeds the statutory limit. This may be partly related to local government having a limited ability to accurately identify the income of other household members, as a result of which they establish eligibility based on a per capita income that is lower than the actual amount. Here we must note, however, that the definition of eligibility as used in the study is based on annual income, while local government awards the benefit on the basis of income earned during the three months preceding the application. As a result, the 30 per cent mentioned above may be a slight overestimate of the number of ineligible recipients.

There are regional differences in the proportion of ineligible recipients: in the poorer regions of northern Hungary and in the northern Great Plain ineligible people are less likely to collect the benefit than in the central and western regions of Hungary. This implies that, in addition to the statutory limits, local governments also take into consideration the relative income situation of applicants when they award the benefit.

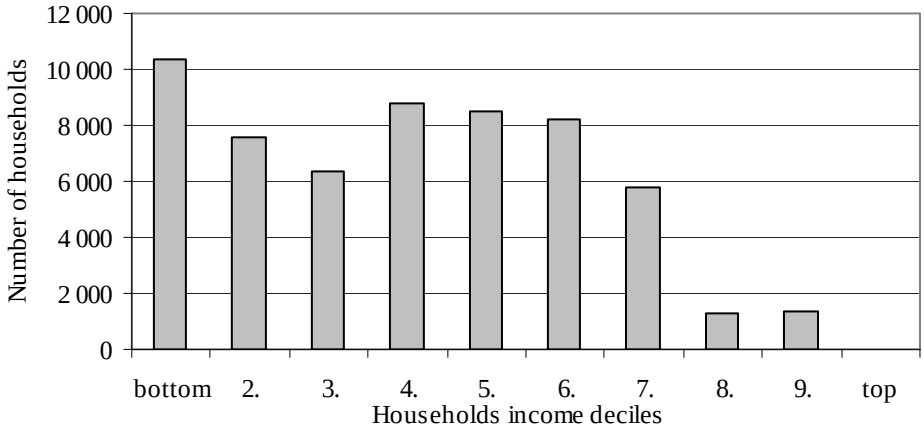
Housing benefit

A decreasing trend may be witnessed in the case of housing benefit, too: between 1998 and 2004, the number of recipients dropped by almost 80,000, from 268,000 to 176,000. This occurred at a time when there was a steady increase

in housekeeping expenses, and it happened despite the fact that maintaining housing conditions was a key priority of social policy (Kőnig, 2004). According to a study conducted by TÁRKI, 16.3 per cent of Hungarian households, or almost 625,000 households, may be regarded as in need of this support, yet only about 30 per cent of those families actually received the benefit. Another problem is that half of the benefits are not channelled to the poorest groups, but to households where 'paying the bills is usually not a problem' (Szivós, 2002). Also, the average benefit amount disbursed to the latter group (HUF 24,800 annually) is significantly higher than the amount disbursed to those in need (HUF 19,960).

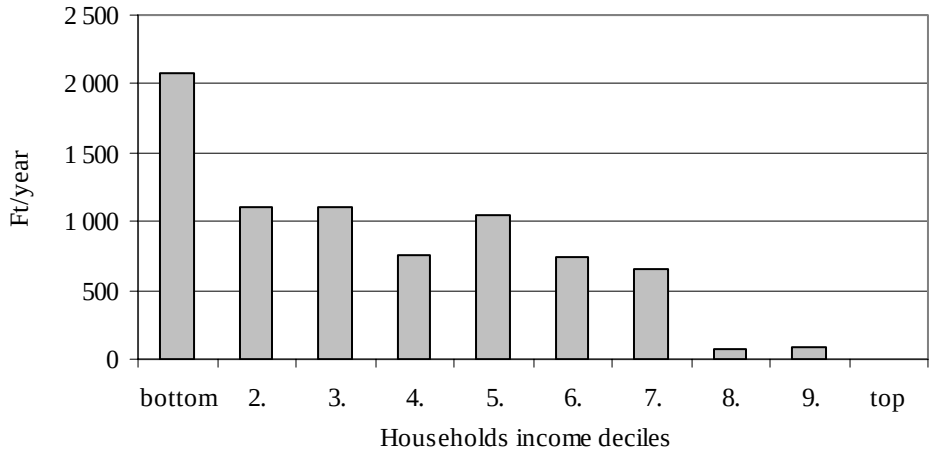
The CSO Household Budget Survey data show a picture similar to the findings above. Although the number of recipients of housing benefit is highest in the bottom decile, the number of beneficiaries is strikingly high in the middle four deciles (Figure 16), which – in the case of a means-tested benefit – points to a flaw in the system. Taking the amount of the benefit into consideration, the share received by the middle third of the population is smaller, but even so Figure 17 shows considerable overpayment.

Figure 16 Distribution of households receiving housing benefit, by income decile, 2003



Source: own calculations based on CSO HBS

Figure 17 The average amount of housing benefit, by decile (HUF/year), 2003



Source: own calculations based on CSO HBS

It is not only the number of recipients of housing benefit that is very low – so is the per capita amount of the benefit: in 2002, the HUF 1,800 average amount of the benefit covered only 8 per cent of the HUF 22,000 it typically costs each month to keep a house. Leaving aside local government regulations, the low amount of the benefit is attributable to the fact that the lowest statutory amount of the benefit, HUF 1,000 per month, has not increased since 1993. In 2003, nearly 70 per cent of disbursements were at or below HUF 3,000, while more than half of the recipients had bills of between HUF 15,000 and HUF 25,000 a month (Kőnig, 2004). Given all this, the link between actual housing expenses and the amount of the benefit is rather tenuous, i.e. the benefit is not aligned with the actual expenditure.

Regular child protection benefit

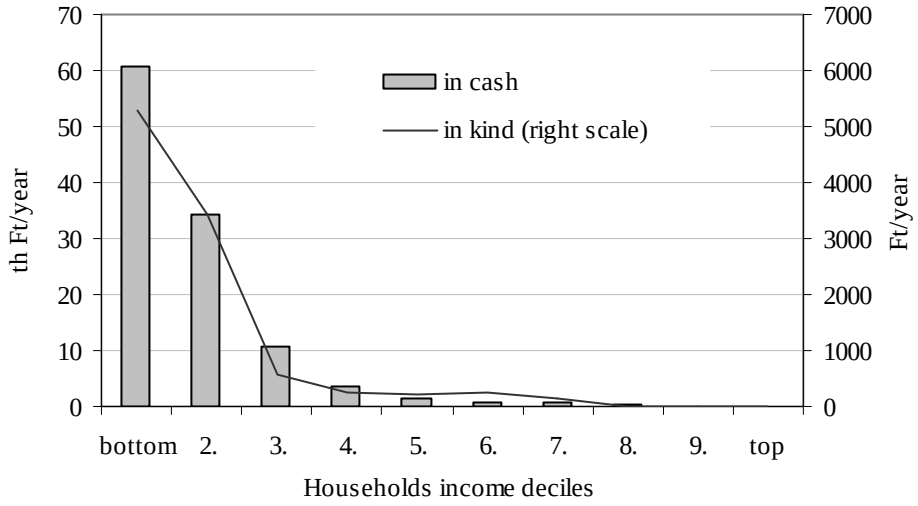
Up to 2005, an income-based element in the family support system was the regular child protection benefit, which was scrapped on 1 January 2006. Earlier analyses of child poverty (Darvas and Tausz, 2001; Ferge, 2001) emphasize the deficiencies of income-dependent benefits in the family support system. In their opinion, even though to improve the targeting of the family support system was always an explicit policy objective over the past two decades, because another goal was to reduce expenditure 'ultimately, the changes in the benefit system did not result in any significant increase in benefits provided to low-income families' (Darvas and Tausz, 2001: p. 7).

According to data from the CSO's household statistics, three-quarters of the total amount paid out as regular child protection benefit was received by people in the lower income deciles and, in particular, the benefit was relatively

efficient in reaching families with children that were at higher risk of poverty (Darvas and Mózer, 2004): 40 per cent of recipients were single-parent families, and the ratio of households with more than one child was significant. In 2001, 57 per cent of households with children in the lowest three deciles of the population received this benefit. At the same time, a significant proportion of households that ought to qualify for the benefit based on their per capita income did not receive the support.

Based on our own calculations (Figure 18), both cash and in-kind child protection benefits are well targeted, and the amounts received by the richer half of the population are negligible.

Figure 18 Average amount of cash and in-kind child protection benefits per household, by decile, 2003



Source: TÁRSZIM 2005

Pensions

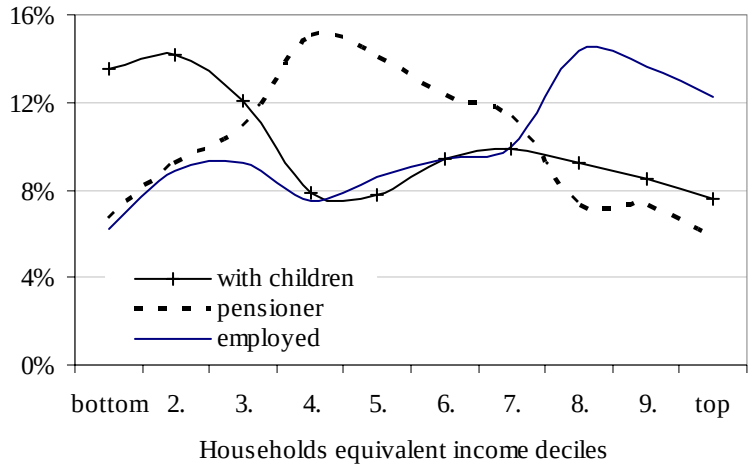
As we mentioned above, old-age and disability pensions are basically insurance-based benefits, and as such fall outside the scope of this paper. However, social considerations also play a role in pension increases (e.g. in the introduction of the 13th-month pension) or in the awarding of disability pensions, and therefore we take a brief look at the situation of pensioners from the perspective of redistribution.

The results of studies investigating the position of pensioners (CSO, 2003; Medgyesi *et al.*, 1999) are consistent, in that the average income situation of pensioners is somewhat worse than that of the working population. They typically belong to the medium-income group, and, compared to the active population, there are far fewer pensioners in the bottom or top deciles. Income

differences are smaller among pensioners, and poorer pensioners are not so far from the poverty line as poor people of an active age.

Figure 19 below reveals that nearly half of pensioner households are in deciles 4 to 7, and far fewer of them are in the lowest or highest deciles than are families with children. Therefore, it is typically not the poorest households that are reached by the 13th-month pension universally paid to all pensioners, but rather those on average income; and, since the amount received is in proportion to the household income, the benefit gives more to those who have a higher income to begin with.

Figure 19 Distribution of households with a pensioner head and of households with children across income deciles, 2005



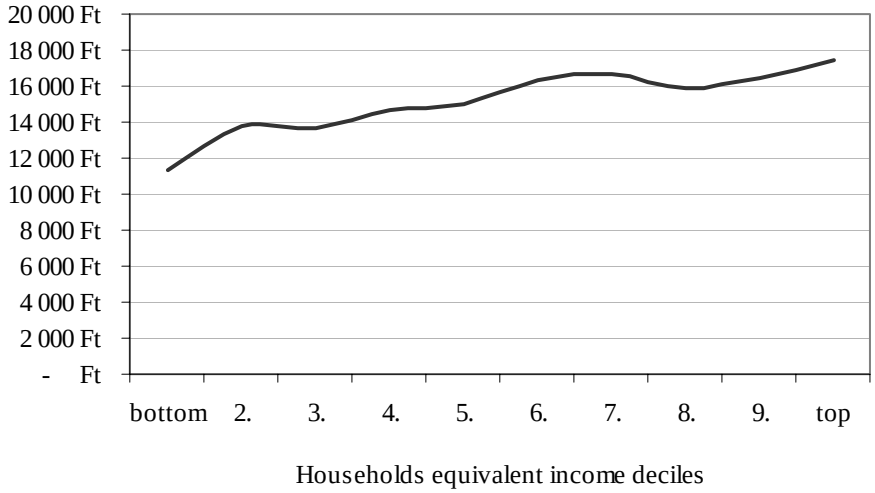
Source: TÁRSZIM 2005

Note: the head of a household is the adult with the largest income in the household, and we classify the household according to the economic activity of that person.

Gas price subsidy

The gas price subsidy is an element of the benefits system that is linked to consumption, and, in 2004, it amounted to almost HUF 44 billion. This benefit, in common with indirect taxes, is rather inefficient, as it creates inverse redistribution. It brings greater benefit to the wealthy than to the poor, partly because wealthier people use more gas (but their consumption still remains within the subsidized band), and partly because poorer households are more likely to use some non-subsidized fuel for heating rather than piped gas. This is also supported by the study by Szivós (2002), which demonstrated that, in the lowest two income deciles, use of traditional fuels is four times the national average, and only just over half of those households use piped gas.

Figure 20 Average gas price subsidy per household, 2006



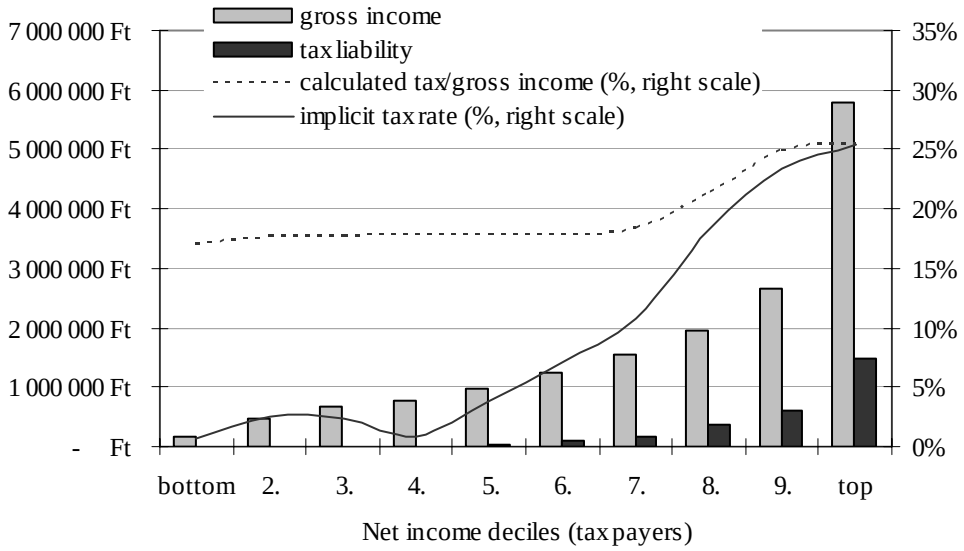
Source: TÁRSZIM 2005

Redistribution impact of taxes

In addition to benefits, taxes (direct, indirect and contributions) may also have a significant impact on redistribution, as they modify the original income of households. Tóth (1997) found that the Hungarian tax system significantly reduces income inequalities, as the distribution of the tax burden across the deciles of taxpayers is much more concentrated than is the distribution of incomes. Focusing on taxpayers, a group that accounts for less than half of the total population, the difference between the planned and the actual progressiveness of the personal income tax system becomes apparent (Figure 21). The curve that illustrates the ratio between calculated tax and gross income shows the tax rate as it would be without tax allowances across the various deciles. This varies between 17 per cent and 25 per cent in the various groups, which is more or less in line with the tax schedule. The implicit tax rate, which shows the ratio between actual tax liability (including tax allowances) and gross income, is much more progressive and gives more benefit to poorer taxpayer groups.

The slight increase in the tax rate witnessed in deciles 2 and 3 is due to the fact that, according to their declared income, these deciles include the majority of entrepreneurs, who are not eligible for employee tax allowance, and therefore their effective tax burden is somewhat higher.

Figure 21 Gross income and tax liabilities, and the implicit tax rates calculated on the basis thereof, 2006



Source: TÁRSZIM 2005

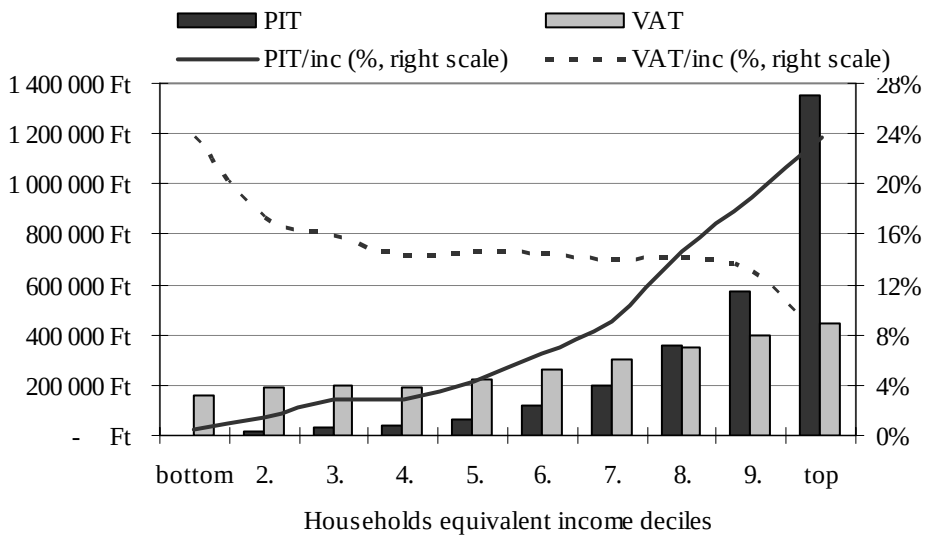
Note: implicit tax rate = actual tax liability/gross income (i.e. including tax allowances); calculated tax = tax calculated according to the tax schedule for consolidated taxable income + tax paid on separately taxed income (i.e. excluding tax allowances).

In the revenue of the Hungarian state budget, the proportion of VAT is about 10–25 per cent higher than that of personal income tax.[15] Both tax types place a burden on households, but personal income tax is very progressive, while VAT has a much flatter distribution across the income deciles (Figure 22).[16] The reason for this is that richer households differ significantly from poorer ones in terms of how much they save, rather than how much they consume. Another reason why VAT is not a good means of redistribution is that goods with preferential VAT (e.g. foodstuffs) are more or less consumed to the same extent by poor and rich households, and therefore the preferential rate provides nearly the same benefit to both poor and rich households.

[15] Benedek *et al.* (2006).

[16] This, however, is partly due to distortions in the database; for more detail see TÁRKI (2005).

Figure 22 Average burden of personal income tax and indirect tax (VAT and excise tax) on households in Forints and as a percentage of disposable income, 2006



Source: TÁRSZIM 2005

5. Summary and recommendations

Welfare expenditure accounts for 62 per cent of total public finances, and about one third of this is spent on social services. Leaving aside pensions, the largest expenditure item, one quarter of social spending, involves price subsidies; the next largest is tax allowances, accounting for about 18 per cent; while only 5 per cent of social spending is allocated to means-tested benefits targeted at helping the poor.

The welfare system performs well from the perspective of reducing poverty, but it operates at a low efficiency. Although a universal benefit, family support reaches its target group relatively well. The level of targeting is mediocre in the case of means-tested benefits, such as regular social assistance, extraordinary social assistance and the housing benefit. Finally, family tax allowance, employee tax allowance and supplementary tax allowance do not reach the poorest people, i.e. they are poorly targeted. Although price subsidies and the preferential VAT rate do reach the poorer groups, they are inversely targeted: they give more to richer households than to poorer ones. The targeting of the 13th-month pension is incorrect in two ways: in the first place, it does not support the poorest people, and in the second place, it gives more to pensioners with a higher income, as it is in proportion to the amount of the pension.

The efficiency of redistribution may be improved through the application of tools befitting the various goals, by better targeting, and by reducing administrative costs.

Targeted cash benefits instead of price subsidies

It is basically cash benefits that most efficiently fulfil social goals, because they enable individual eligible recipients to decide how they wish to spend the benefit. Efficiency would improve if socially targeted price subsidies were discontinued or replaced with cash benefits. Cash benefits also enable better targeting, ensuring that only those in need receive support.

Consequently, we recommend abolishing the *gas price subsidy* and replacing it with a compensation scheme available only to those living on a low income. Although lack of data prevents us from examining the extent of redistribution, the same logic applies to *medicine price subsidies*. The existing system provides unjustified and unfair support to certain manufacturers, and encourages the consumption of medicines, regardless of actual need. We therefore propose that the price subsidy be abolished, and instead cash (or in-kind) benefits be provided to those in need. We did not review price subsidies in the field of *transport*: here, we recommend that clear targets be identified (determining the extent to which subsidies serve social or environmental functions), and that the social element be separated and replaced with a targeted cash benefit.

Preferential VAT works in a similar way to price subsidies, and is therefore not suited to social goals. As was demonstrated above, the distribution of the *VAT burden* across the income deciles is far from progressive, i.e. the bulk of the benefit provided via preferential VAT is enjoyed by the better-off groups in society. We believe it would be more efficient to abolish socially targeted VAT allowances (e.g. VAT on medicine), and perhaps compensate those in need with direct cash or in-kind benefits.

Better targeting of benefits

In the existing system, *in-kind benefits* also accomplish significant redistribution, but most of them do not help those in need, either because the benefits are universally available, or because eligibility is determined inappropriately. We recommend a review of the related regulations, and a reduction in the annual budgets, especially in the case of home purchase benefits, the free public health care benefit and employer-provided benefits that serve welfare purposes (e.g. railway ticket contribution).

With some cash benefits we found that, contrary to their objective, they support groups of average or higher income. An example is the *13th-month pension*, which does not support the poorest households (since the majority of pensioners live in average-income households), and gives more to people on a higher income (being in proportion to the amount of the pension).

Another set of elements in the benefit system that favour wealthier people are *tax allowances*, in particular the family tax allowance. The poorest households typically do not have taxable income, and thus do not benefit from this allowance. Consequently, we recommend that the employee tax allowance be abolished, and that family tax allowance for families with three or more children be built into the family support.

Simplified tax system

The existing *personal income tax system* includes many exceptions, which makes it rather complex and unclear. The efficiency of the tax system could be significantly improved by increasing its transparency, which is contingent on the simplicity of the tax base. Therefore, we recommend scrapping the allowances (including the employee tax allowance) and the special regulations pertaining to specific incomes that enjoy preferential treatment (e.g. those of primary agricultural producers), and broadening the overall tax base.

References

Alm, J. (1996): 'Explaining tax compliance', in S. Pozo (ed.), *Exploring the Underground Economy*

Barr, N. (1998): *The Economics of the Welfare State*, 3rd edition (Oxford University Press).

Benedek, D. and Lelkes, O. (2005): 'Examining Hungary's income redistribution through a microsimulation model', *PM Kutatási Füzetek* [*Research Booklets of the Ministry of Finance*] 10.

Benedek, D., Lelkes, O., Szabó, M. and Scharle. Á. (2004): 'The structure of the revenues and the expenditures of the Hungarian state budget, 1991-2004', *PM Kutatási Füzetek* [*Research Booklets of the Ministry of Finance*] 9.

Benedek, D., Lelkes, O., Szabó, M. and Scharle. Á. (2006): 'The structure of the revenues and the expenditures of the Hungarian state budget, 1991-2004', *Közgazdasági Szemle* [*Economics Review*] 53.

Benedek, D. and Scharle, Á. (forthcoming): 'The impact of the family benefits-related elements of the 100 Steps Programme on the income of families with children', in TÁRKI, *Társadalmi Riport* [*Social Report*] (TÁRKI, Budapest).

Central Statistics Office (2003): *The Situation of the Elderly in Today's Hungary on the Basis of the Household Budget Survey, 1993-2001* (CSO, Budapest).

Csaba, I. and Tóth, I. Gy. (1999): *Political Economics of the Welfare State* (Osiris, Budapest): pp. 7-41.

Darvas, Á. and Mózer, P. (2004): 'Whom to support?', *Esély* 6.

Darvas, Á. and Tausz, K. (2001): 'Child poverty and family benefits', *Esély* 2.

Esping-Andersen, G. (1990): *The Three Worlds of Welfare Capitalism* (Princeton University Press).

European Commission (2004a): European Economy – Public Finances in EMU, 2002 (3)

European Commission (2004b): *Structures of the Taxation Systems in the European Union, Data 1995-2002* (European Commission, Taxation and Customs Union DG, Brussels).

Ferge, Zs. (2001): 'The heart of the state budget', *Beszélő*, February.

Ferge, Zs. and Juhász, G. (2004): 'Accession and social policy: the case of Hungary', *Journal of European Social Policy*, Vol. 14 (3): 233–51.

Firle, R. and Szabó, P. A. (2006): Analysis of the targeting of the regular social benefit and its impact on the job supply, Ms., Ministry of Finance.

Havasi, É. (2005), 'The role of transfer incomes in reducing poverty', *Esély* 4: 66–86.

Kőnig, É. (2004): 'The Bermuda Triangle of benefits', *Esély* 1: 49–64.

Medgyesi, M., Sági, M. and Szivós, P. (1999): 'The third age: the income situation and housing conditions of the elderly', *Társadalompolitikai Tanulmányok* [*Social Policy Studies*] 13.

Mózer, P. (2002): *The Impacts of Social Policy from 1998 to Date*, I-III (József Attila Kulturális és Szociális Alapítvány [Attila József Cultural and Social Foundation]).

New Hungary (2006), *Freedom and Solidarity: The Programme of the Government of the Republic of Hungary for a Successful, Modern and Just Hungary, 2006–2010,* http://misc.magyarorszag.hu/binary/7843_kormanyprogram2006_tordelt.pdf

Orbán, G. and Palotai, D. (2005): 'The sustainability of the Hungarian pension system', *MNB-tanulmányok* [*Studies of the National Bank of Hungary*] 40.

Pete, P. (2001): 'A framework to analyse the basic principles of a future public finances reform', *Közgazdasági Szemle* [*Economics Review*] 48 (10): 810–23.

Pierson, C. and Castles, F. (2000): *The Welfare State Reader* (Polity Press).

Sapir, A. (2005): 'Globalization and the reform of European social models', *Bruegel Policy Brief* 1.

Szivós, P. (2002): Housing costs, recipients of benefits and those in need of support, Ms., TÁRKI.

TÁRKI (2005): TÁRSZIM 2005 Professional microsimulation model, User Manual.

Tóth, I. Gy. (2005), *Income Distribution: From the Change of the Economic System to EU Accession* (Századvég, Budapest).

Tóth, I. J. (1997): 'The income structure of taxpayers and the distribution of the tax burden in 1996', *Társadalompolitikai Tanulmányok* [*Social Policy Studies*] 2.

Appendix

F1. Types of benefits

1) **Cash benefits** fall into three categories:
   1. *Insurance-based benefits* (linked to contributions) may have fixed amounts, or may be based on the amount of previous earnings or contributions. This category includes benefits such as GYED, the temporary and regular social benefit, or the pregnancy and confinement benefit.
   2. *Non-insurance based benefits* fall into two groups:
      (i) *universal benefits* (e.g. family support, GYES)
      (ii) *means-tested* or income based *benefits* (e.g. regular social assistance, regular child protection benefit).
   3. The third group includes *tax allowances*, which increase the net earnings of certain social groups by lifting their obligation to pay specific taxes.
2) The recipients of **price subsidies** may be the consumer or the producer. In this category we identified four major transfers:
   a) price subsidy for medicine and therapeutic aids
   b) gas price subsidies
   c) consumer price subsidies
   d) production benefits and normative support for local transport.
3) **In-kind benefits** include, among others, housing benefits, expenditure by local government on free public health care, and items covering expenditure on higher education, such as benefits for the purchase of lecture notes or for student hostel accommodation.

F2. Tax-related benefits

Tax-exempt benefits include the following (where possible, we give the entire amount and the number of those eligible):

- GYES (HUF 48.7 billion; 163,000 eligible people in 2004) and GYET (HUF 13.1 billion, 47,000 eligible people in 2004);
- Foster parent benefit (legal minimum: HUF 12,000/month; to professional foster parents HUF 105,000/month; number of foster parents was approx. 5,000 in 2004);
- Nursing benefit (HUF 8.5 billion in 2004);
- Social carer benefit, up to HUF 48,000 per year;
- Part of the vocational training benefit;
- Stipendium, benefit for textbooks, lecture notes and accommodation paid to full-time students at higher educational establishments (approx. HUF 25 billion in 2004);
- Cash benefits not covered above, awarded to students by educational establishments, local government or the Church;
- Payment to referees of amateur competitions, up to HUF 5,000 per game and up to the monthly minimum wage, if the taxpayer does not wish to deduct expenses from such income;
- Students' income (e.g. working as librarian, laboratory assistant or teaching assistant), up to the minimum wage;
- Income from prison work (number of prisoners in 2003: 12,464);
- Revenue from the categories listed above collected from a member state of the European Economic Area;
- Benefits related to the Hungarian Corvin Chain;
- Income not separately taxed, which is tax exempt pursuant to an international treaty established by an act of law or a government decree or on the basis of reciprocity, but one that may be recognized in calculating the tax liability;
- Revenue recognized in the consolidated tax base, collected from a member state of the European Economic Area, which under the member state's local law is exempt from income tax even if paid to a private person with tax residence in the given country;
- Benefits related to Gold, Diamond, Iron or Ruby diploma certificates, awarded on the basis of the higher education act, in amount up to three times the minimum wage.

The table below lists the main tax-exempt earnings and tax allowances.

Table F1: Tax allowances with a declared amount of over HUF 10 billion and the amounts actually claimed, the number of recipients and amount per capita

Tax allowances	**2006 (plan)**	**2005 (forecast)**	**2004 (actual)**			**2003 (actual)**		
	HUF million	*HUF million*	*HUF million*	*persons*	*HUF '000/ head*	*HUF million*	*persons*	*HUF '000/ head*
Employee tax allowance and supplementary tax allowance	263 470	240 935	238 731	2 877 540	83	240 415	2 956 095	81
Family allowance*	13 086	79 928	80 749	969 512	83	83 086	1 012 039	82
Tax allowance for life and pension insurance	22 926	22 476	21 695	934 836	23	20 295	981 517	21
Tax allowance for the repayment of housing loans	21 434	22 562	21 778	250 160	87	31 219	269 484	116
Adult education	3 600	3 530	16 661	407 960	41	1 744	78 550	22
PC lease	4 000	8 000				14 740	270 479	54
Allowance for payment to voluntary insurance fund	--	10 570	10 193	616 306	17	9 545	624 745	15
Total	**358 167**	**416 954**	**416 719**			**525 141**		
Of which: unclaimed tax allowance	15 900	29 000	19 759			21 267		
Total	**342 267**	**387 954**	**396 960**			**503 874**		

* The great difference between 2005 and 2006 is due to the restructuring of the family benefit system.

Source: Ministry of Finance.

F3. Distribution of social benefits

Table F2: The distribution of social benefits, 2004

	Amount (HUF billion)	Ratio (per cent)	As percentage of GDP
Cash benefits	**1004,5**	**54,5**	**5,0**
Insurance-based benefits (excluding pension)	158.9	7.1	0.8
Non-insurance based benefits	447,5	24,3	2,2
a. Income-independent benefits	342.3	15.2	1.7
Of which: family support	185.5	8.3	0.9
b. Benefits linked to income certificate	108.7	4.8	0.5
Tax allowances	398.1	17.7	2.0
Of which: employee tax allowance	238.7	10.6	1.2
In-kind benefits	**297.6**	**13.3**	1.5
Price subsidies	**541.5**	**24.1**	2.7
Price subsidy for medicine and therapeutic aids	332.0	14.8	1.6
Consumer price subsidies	103.8	4.6	0.5
Production support and normative support for local transport	61.9	2.8	0.3
Gas price subsidy	43.8	2.0	0.2
Total excluding pensions	**1845,3**	**100,0**	**9,2**
Pensions*	**1 678.9**		**8.2**
Total including pensions	**3524,2**		**17,4**

* Only pension expenditure related to the Pension Fund

Source: Ministry of Finance.

Table of contents

Available Working Papers in the series

1. László Kállay, Eszter Kissné-Kovács, Kálmán Kőhegyi: Market environment, regulation and support for small enterprises. August 2003.
2. Tamás Fleischer: Infrastructure networks and competitiveness. August 2003.
3. Magdolna Sass: Competitiveness and economic policies related to foreign direct investment. September 2003.
4. Ágota Scharle: Competitiveness and the labour market. October 2003.
5. György Pataki, Györgyi Bela, Norbert Kohlheb: Competitiveness and environment protection. December 2003.
6. Balázs Borsi: Technological modernisation, innovation and research and development as factors of competitiveness in the economy of Hungary. February 2004.
7. Orsolya Lelkes: Social cohesion in Hungary: Theoretical foundations and facts. March 2004.
8. John Hills: Privatisation and public welfare: Principles and economic analysis. May 2004. (Available only in Hungarian)
9. Dóra Benedek, Orsolya Lelkes, Ágota Scharle and Miklós Szabó: The structure of general government expenditure and revenues in Hungary, 1991-2002. August 2004.
10. Dóra Benedek and Orsolya Lelkes: Assessment of income distribution in Hungary using a microsimulation model. January 2005.
11. Mária Lesi and Gabriella Pál: Theoretical foundations and EU regulation of carbon-dioxide emission trading. March 2005.
12. Mária Lesi and Gabriella Pál: The expected impact of the introduction of the carbon-dioxide trading on the domestic power market. April 2005.
13. Zsombor Cseres-Gergely: Inactive middle-aged people and households: incentives and constraints. June 2005.
14. Róbert Iván Gál, Árpád Törzsök, Márton Medgyesi and Tamás Révész: Generational accounts in Hungary, 1992-2001. July 2005.
15. Anna Vidor: The effect of saving incentives: empirical evidence from Hungary, October 2005.
16. Dóra Benedek, Mariann Rigó, Ágota Scharle and Péter Szabó: Increases in the minimum wage in Hungary, 2001–06, January 2006.